

findings on such impacts. Any decision to provide assistance under Section 116 would be based on an evaluation of requests for assistance from affected units of local government or the State of Nevada pursuant to Section 116 that documented likely economic, social, public health and safety, and environmental impacts. DOE would enter into discussions with the State of Nevada and affected units of local government and consider appropriate support and mitigation measures.

Assuming the proposed repository site was designated and transportation modes and routes were determined, local jurisdictions would be better able to identify the likely economic, social, public health and safety, and environmental impacts that would be the basis for a request for economic assistance, which could include assistance in providing additional medical and emergency response facilities, under Section 116(c) of the NWSA.

7.4.2 (11982)

Comment - EIS000235 / 0008

The Final EIS should consider implementation of the Radiological Emergency Response Plan for the Grover C. Dils Medical Center as a possible mitigation measure.

Response

It is premature to commit to specific mitigation measures related to transportation until decisions regarding the proposed repository and specific modes and routes of transportation, if appropriate, have been made.

Closer to the time that transportation would occur, DOE would provide technical assistance and funds to states for training for public safety officials of appropriate units of local government and Native American tribes through whose jurisdictions transportation of spent nuclear fuel or high-level radioactive waste would occur. This assistance is required by Section 180(c) of the NWSA, and is required to cover procedures for safe routine transportation and also for dealing with emergency response situations.

In addition, Section 116(c) of the NWSA allows the Secretary of Energy to provide financial and technical assistance to the State of Nevada and any affected unit of local government requesting assistance to mitigate impacts of the development of the repository.

7.5 Repository Affected Environment and Impacts

7.5.1 LAND USE

7.5.1 (106)

Comment - 32 comments summarized

Commenters are concerned that the size of the land withdrawal area would result in too much land taken away from the public and Native Americans. Commenters felt the EIS should provide a justification for such a large area and address the impacts of removing such a large piece of public land. Issues included: basis of 12-mile distance to southern boundary, status of current land ownership, intrusion onto the town boundaries of Amargosa Valley, ability to maintain the withdrawal area after repository closure, existence of environmental management sites within the proposed withdrawal area, and impacts on current land uses.

Response

As discussed in Sections 3.1.1.3 and 4.1.1.1 of the EIS, regulations issued by the Nuclear Regulatory Commission require that land for the repository be either under the jurisdiction and control of DOE or permanently withdrawn and reserved for its use (10 CFR 63.120). Furthermore, the Nuclear Regulatory Commission regulations require the repository operations areas and postclosure controlled areas to be free and clear of encumbrances such as (1) rights arising under the general mining laws, (2) easements or right-of-ways, and (3) all other rights arising under lease, rights of entry, deed, patent, mortgage, and appropriation or prescription. Only Congress has the power to withdraw Federal lands permanently for the exclusive purpose of a specific agency and any other uses of the lands would be subject to conditions of the withdrawal. As a practical matter, DOE control of the surface and subsurface estates would reduce the potential for human actions that could adversely affect the repository's ability to isolate the waste.

As noted by the commenters, the anticipated land withdrawal area is large compared to the size of the proposed repository. This would allow for the protection of the repository itself, its surface transportation and other handling facilities, its waste packaging, its offices, and its transport decontamination facilities.

The approximately 18-kilometer (11-mile) distance prescribed by the regulators for calculating potential doses to hypothetical recipients (the reasonably maximally exposed individual) was defined as the southern boundary of the Nevada Test Site. The potential dose receptor location was based on estimating the likely future location of a small community of persons and farms given the physical setting of the affected areas and the depth of water in that setting. The southern boundary of the controlled area is defined at 40 CFR Part 197. As mandated by the Environmental Protection Agency, DOE used a conservative controlled area (a subset of the land withdrawal area) to extend control toward the closest populated area, the Town of Amargosa Valley, thus preventing future encroachment as the basis for analysis in this EIS. The final identification of either a restricted or controlled area boundary would be defined during the licensing process conducted by the Nuclear Regulatory Commission if there was a decision to construct a repository at Yucca Mountain. DOE has revised Section 3.1.1.3 of the EIS to provide a clearer explanation of the rationale for the size of the potential land withdrawal area, including a discussion of the controlled area.

As described in Section 3.1.1.3 of the EIS, the size of the potential land withdrawal area is about 600 square kilometers (230 square miles or 150,000 acres). All but 1 square kilometer are under the control of three Federal agencies: DOE, the U.S. Department of Defense, and the U.S. Department of the Interior. The remaining 1 square kilometer (0.39 square mile or 250 acres) is private land at the southern end of the withdrawal area. There are no State or tribal lands within the withdrawal area.

About two-thirds of the withdrawal area is already withdrawn from use by the general public for DOE operations at the Nevada Test Site and for U.S. Air Force operations at the Nellis Air Force Range. The remaining one-third of the withdrawal area is public land administered by the Bureau of Land Management. As described in Section 3.1.1.3 of the EIS, DOE was issued a right-of-way reservation by the Bureau to use these public lands and Air Force lands for site characterization of Yucca Mountain. The Bureau has also withdrawn a small area at Yucca Mountain (about 4,300 acres) from the general mining and mineral leasing laws to preclude inadvertent or deliberate drilling into the repository block by prospectors.

DOE understands that the Western Shoshone people maintain that the Ruby Valley Treaty of 1863 gives them rights to certain lands in Nevada, including the Yucca Mountain region, as discussed in Section 3.1.1.4 of the EIS. DOE must nevertheless abide by decisions of the U.S. Supreme Court that have ruled that the United States has met its obligations with the Indian Claims Commission, and that the aboriginal title of the land has been extinguished.

The overlap between the withdrawal area and the unincorporated Town of Amargosa Valley referred to by commenters is public land administered by the Bureau of Land Management. The Bureau, under the principles of multiple use, manages this land; the Federal Government has not conveyed it to any municipality. Nye County Ordinance 139 created the unincorporated Town of Amargosa Valley, a taxing district of about 1,295 square kilometers (500 square miles) that overlaps the southern part of the withdrawal area by about 202 square kilometers (78 square miles). DOE has revised Section 3.1.1.3 of the EIS to recognize this overlap.

Known uses of the public land within the withdrawal area include mining from a patented mining claim, occasional mineral prospecting, and occasional recreational use (for example, an annual off-highway vehicle race). A water well in the withdrawal area supplies water to a nearby mine, and the Bureau of Land Management has designated part of this area as a utility corridor. In addition, Nye County monitors numerous wells in this area as part of the County's Early Warning Drilling Program. Some of these activities could be adversely impacted by a land withdrawal, depending on its size and any congressional land-use restrictions contained in the withdrawal legislation. Depending on the specifics of the withdrawal legislation, the patented mining claim could be adversely impacted after repository closure, but by that time the mineral resources of the claim would likely have been depleted. DOE has revised Section 4.1.1 of the EIS to describe potential impacts to activities such as restrictions on hiking, camping, off-road vehicle use, and mineral exploration and development if the land area identified in the EIS were withdrawn by Congress. There are no environmental management sites within the land withdrawal area.

If Congress withdrew the land for repository purposes, as discussed in Section 4.1.1.1 of the EIS, conditions for nonrepository land uses could be specified in the withdrawal legislation, thereby minimizing the impacts to current users.

7.5.1 (444)

Comment - EIS000090 / 0001

A lot of people aren't aware of the DOE controls Yucca Mountain and controls the test sites, but in fact the Defense Department that's taking over control of both of those facilities.

I have the paperwork. It's no big secret.

The defense programs, institutional controls, land withdrawal restrictions. The Defense Department is the landlord at the Nevada Test Site.

Response

The land withdrawal area is Federal land administered by three agencies: the U.S. Department of the Interior, Bureau of Land Management; the U.S. Air Force; and DOE. Approximately 315 square kilometers (78,000 acres; 53 percent) of the area is withdrawn for DOE by Public Land Order 2586 for the Nevada Test Site. About 100 square kilometers (24,000 acres; 16 percent) of the area is withdrawn for the Air Force by Public Law 99-606 for the Nellis Air Force Range. The remainder of the land withdrawal area is public land administered by the Bureau of Land Management under a multiple-use classification. The Bureau of Land Management issued a right-of-way reservation for the site characterization of Yucca Mountain. DOE also has a small withdrawal [about 17 square kilometers (4,300 acres), Public Land Order 6802] from the general mining and mineral leasing laws to preclude inadvertent drilling by prospectors into the repository geologic formation. DOE obtained the information used for land ownership in the EIS from Master Title Plats provided by the Bureau of Land Management. DOE is not aware of any impending change in control by the Department of Defense of the land withdrawal area associated with the Yucca Mountain Project.

7.5.1 (5470)

Comment - EIS001887 / 0152

Page 3-9; Table 3-4 - Current land ownership and public accessibility to the analyzed land withdrawal area.

Except for the one patented mining claim referenced in this table, the title of the table is incorrect and misleading. While the patented mining claim may be "owned" by a private party, none of the remaining lands given in the table are under federal ownership. All of the lands defined in the table, except for the one mining claim, are public lands. The title of the table should be changed to reflect the lands under public ownership, albeit temporarily withdrawn for federal use.

Response

DOE has revised the title of Table 3-4 in response to this comment.

7.5.1 (5857)

Comment - 010422 / 0001

Have full disclosure of: the present ownership of the properties and previous owner, if now owned by the federal government, and purchased by the government in the previous five years. Actual ownership, not just a corporate or partnership name, but those who are the actual owners and the consideration paid or proposed to be paid by the federal government for the property.

Response

It is not clear to what properties the commenter is referring. However, with regard to proposed repository properties, existing easements and information on land that could be included in the potential land withdrawal area are a matter of public record. Historic ownership, acquisition costs, etc., are not presented in the EIS because it would provide no discriminating information for decisionmakers. With regard to lands within the transportation corridors, no definitive information is available about which specific tracts of land would be impacted. Should lands require acquisition by the Federal Government, the purchase price or the exercise of eminent domain provisions would be established pursuant to Federal regulations.

7.5.1 (6067)

Comment - EIS001898 / 0010

Although flexibility exists in the amount of land that is to be withdrawn for the geologic repository operations area and the post-closure controlled area, the extent of the land withdrawal influences the type and magnitude of impacts that should be considered in the impact statement. The DEIS does not provide a clear basis for determining the extent of the proposed land withdrawal nor does it assess the full range of impacts associated with the land withdrawal (e.g., socioeconomic, water use, cultural).

Basis:

According to DEIS Section 1.4.1 (Purpose and Need for Agency Action-Yucca Mountain Site), the area needed for development of the surface repository is approximately 3.5km² with up to approximately another 600 km² set aside as a buffer zone. However, the severity of impacts is dependent on the area to be withdrawn.

The FEIS should include an assessment of the potential impacts of removing a large area (e.g., 600 km² is used as the size of the potential land withdrawal on pages 2-1 and 2-2 of the DEIS) from other possible uses. The withdrawal would preclude or limit use of the land at any time for other purposes by the public or by Native Americans. Development of water resources on this land by private individuals, businesses, industry, or the State of Nevada might also be prohibited. These impacts are not fully assessed in the DEIS.

Recommendation:

The impacts associated with the land withdrawal should be discussed systematically in the FEIS, including impacts on cultural resources and land use.

Response

The EIS identified a land withdrawal area in Section 3.1.1.3 to comply with regulations issued by the Nuclear Regulatory Commission concerning land ownership and control for a repository at Yucca Mountain (10 CFR Part 63). The safety of the repository requires DOE to demonstrate with a reasonable expectation that the long-term performance of the repository can meet the environmental radiation-protection standards established by the Environmental Protection Agency (40 CFR Part 197). Essentially all of the land identified for withdrawal (that is, about 229 out of 230 square miles) is Federal land. About 1 square kilometer at the southern end is private land. There is no State land or tribal land within the withdrawal area. If Congress withdrew the land for a repository as discussed in Section 4.1.1.1 of the EIS, it could specify conditions for other land uses as part of the withdrawal. The land withdrawal could eliminate currently existing opportunities for multiple use, including recreation, mineral exploration and mining. Because the lands within the withdrawal area do not have unique characteristics that have historically attracted the public, and because large tracts of public land occur nearby, DOE believes that the impacts to people who use this land would be negligible. DOE acknowledges in the EIS that Native Americans consider the intrusive nature of the repository to be an adverse impact to all elements of the natural and physical environment.

7.5.1 (6153)

Comment - EIS001654 / 0032

Page S-63. Unavoidable Adverse Impacts Should be Compared with the Much Greater Impacts of No Action Alternatives

We recognize this section is a requirement of NEPA [National Environmental Policy Act], but to the reader it could be misinterpreted in terms of comparative risks and consequences. For example, the first bullet on page S-63 states that the permanent withdrawal of approximately 230 square miles of land for the repository would likely prevent human use for other purposes. To someone living in urbanized areas and unfamiliar with the character of the land in question, that seems like a large quantity of land to be "lost." Yet, page 10-1 states the land "has a low resource value, is remote, and is partly withdrawn, the *resultant impact would be small.*" (emphasis added.)

If a similar comparison were to be provided of consequences of similar sized 'withdrawal' from use adjacent to the 77 current storage sites over the 10,000-year period under the No Action Alternatives, the adverse impacts would be profound and unacceptable.

Response

DOE agrees that the land surrounding existing nuclear facilities would likely be less remote than the land surrounding the proposed geologic repository at the Yucca Mountain site. However, the regulations that apply to the construction and operation of a geologic repository at Yucca Mountain are different than those that apply to the operation of nuclear powerplants. Therefore, the suggested comparison would be inappropriate. In addition, because there is substantial uncertainty about the locations and identity of future landowners, and/or the nature of future land uses, in the vicinity of commercial nuclear powerplants, it would be inappropriate for DOE to speculate on these matters. However, if the decision were made to construct the repository, this could eventually free up land at the commercial sites for other uses. As noted in Section 3.1.1.3 of the EIS, the proposed repository withdrawal is located almost on Federal land (with the exception of a private patented mining claim at the southern end of the withdrawal area.). Storage facilities for spent nuclear fuel and high-level radioactive waste in the No-Action Alternative analysis would be on existing commercial nuclear reactor sites and DOE sites or on the lands that are either owned by the utility (for commercial reactors) or controlled by the Federal Government (DOE and other government sites). The land required for a storage facility at a nuclear powerplant is typically a few acres, which is a small percentage of the land available at these current sites. The operation of a typical independent spent fuel storage facility at a Nuclear Regulatory Commission-licensed installation would probably require no more land than that already disturbed at the existing facility. The analysis of the No Action Alternative in the EIS alternated the location of the storage facility between two adjacent locations on the existing sites every 100 years; therefore, no new land would be disturbed.

7.5.1 (7122)

Comment - EIS001106 / 0014

An intention of NEPA [National Environmental Policy Act] is to bring all the environmental acts together for an individual major action. Typically most federal agencies succeed in this instance, as is the case for the Yucca Mountain DEIS. Where the DEIS does fall short is in regard to joint regional land use planning with other agencies, citizens, and private stakeholders.

Response

As described in Section 3.1.1 of the EIS, the Yucca Mountain Project (YMP) is a tenant on land under the administration of three Federal agencies: the U.S. Department of the Interior, Bureau of Land Management for public land; the U.S. Air Force for the Nellis Range; and DOE for the Nevada Test Site. Use of the Nevada Test Site area by the YMP is controlled by an intra-agency Memorandum of Agreement with DOE's Nevada Operations Office that allows the use of about 230 square kilometers (89 square miles) of the Nevada Test Site (NTS) for site characterization activities. Through the Memorandum of Agreement, the YMP is accountable for conducting its activities in accordance with the same environmental requirements as the NTS. The Memorandum of Agreement gives the YMP technical responsibility independent of, but in coordination with, environmental activities of the NTS. In addition, DOE was issued right-of-way reservations by the Bureau of Land Management for access to the portions of public land and the Nellis Range for site characterization activities by the YMP (the Nellis right-of-way was recently renewed until April 2004 and the public land right-of-way was recently renewed until January 2008). These agreements also contain environmental requirements. Therefore, as a tenant, the YMP falls under agreements with the Bureau of Land Management, the Air Force, and the DOE Nevada Operations Office.

For the part of the site on the Nevada Test Site, the YMP falls under the Resource Management Plan of DOE's Nevada Operations Office. If Congress authorized a land withdrawal for the proposed repository at Yucca Mountain, DOE would re-evaluate the need for a site-specific land-use plan to ensure compliance with all applicable requirements. That plan, based on the principles of ecosystem management and sustainable development would formally synthesize the YMP policies and procedures already in place; draw on the successes of the Resource Management Plan for the Nevada Test Site; and solicit input from Federal and State agencies, stakeholders, and the general public.

7.5.1 (7348)

Comment - EIS001106 / 0024

Impact assessment under NEPA [National Environmental Policy Act] is meant to be a substantive learning process such that agencies can see how to coordinate and integrate proposed actions. The Yucca Mountain DEIS fails to accomplish this in one notably significant instance, the so-called Five-Party Interagency Agreement. The interagency agreement calls for integrated and coordinated land use planning in accordance with the tenets of

ecosystem management in the Yucca Mountain region. This is missing from the DEIS, setting the Yucca Mountain site apart from all contiguous land use plans.

Response

The five-party Cooperative Agreement coordinates and enhances management of natural resources in the Great Basin and Mojave Desert ecosystems on the Nellis Air Force Range, Desert National Wildlife Range, and the Nevada Test Site. The five agencies are DOE's Nevada Operations Office (operator of the Nevada Test Site), the U.S. Air Force (operator of the Nellis Air Force Base), the Bureau of Land Management's Las Vegas Field Office, the U.S. Fish and Wildlife Service, and the State of Nevada. If a repository was developed at Yucca Mountain, DOE would consider including the Yucca Mountain Project in the Cooperative Agreement.

At present, the Yucca Mountain DOE site is a tenant on land under the administration of three Federal agencies: the U.S. Department of the Interior, Bureau of Land Management; the U.S. Air Force for the Nellis Range; and DOE for the Nevada Test Site. These agencies are parties to the Five-Party Cooperative Agreement. The DOE Nevada Operations Office is the responsible landlord of the Nevada Test Site portion of the Yucca Mountain site. Use of that site by the Yucca Mountain Project is controlled by an intra-agency Memorandum of Agreement with the Nevada Operations Office that allows the use of about 230 square kilometers (89 square miles) of the Nevada Test Site for characterization activities. Through the Memorandum of Agreement, the Yucca Mountain Project is accountable for conducting its activities in accordance with the same environmental requirements as the Nevada Test Site. The Memorandum of Agreement gives the Yucca Mountain Project technical responsibility independent of, but in coordination with, the environmental activities of the Nevada Test Site. In addition, the Bureau of Land Management issued DOE right-of-way reservations for access to portions of public land and the Nellis Range for site characterization activities by the Yucca Mountain Project. These reservations contain environmental stipulations that conform to the understandings of the Five-Party Agreement. Therefore, as a tenant, the Yucca Mountain Project falls under the respective agreements with the Bureau of Land Management, the Air Force, and the DOE Nevada Operations Office.

DOE did not adopt an ecosystem approach for biological analysis in this EIS. An "ecosystem" approach is one method for analyzing potential impacts on biological resources. DOE discusses its evaluation of the ecosystem approach and its reasons for choosing other analytical tools in Section 3.1.5 of the EIS.

7.5.1 (9852)

Comment - EIS001888 / 0417

[Clark County summary of comments it has received from the public.]

Commenters requested that the EIS examine the effects of construction and operation of the repository and its transportation systems on federal, state, and county existing land uses (e.g., land quality, agriculture, livestock use, mineral/oil exploration, protected or otherwise sensitive lands, withdrawn areas, availability of water resources) and land use plans, policies, and controls.

Response

DOE structured the cumulative impact assessments presented in Chapter 8 of the EIS by identifying actions the effects of which could coincide in time and space with the effects from the proposed repository and associated transportation activities. Consistent with Council on Environmental Quality regulations (40 CFR 1508.7), DOE considered past, present, and reasonable foreseeable actions in its assessment of cumulative impacts and has reviewed a number of actions, both current and proposed, to determine relevance. The expression "reasonably foreseeable" refers to future actions for which there is reasonable expectation that the action could occur, such as a proposed action under analysis, a project that has already started, or a future action that has obligated funding.

The identification of the relevant actions was based on reviews of resource, policy, development, and land use plans prepared by agencies at all levels of government and from private organizations, other environmental impact statements, environmental assessments, and tribal meeting records. Pursuant to Council on Environmental Quality regulations [1502.16 (c) and 1506.2], in addition to the assessment of potential environmental impacts, potential conflicts with plans issued by various governmental entities were considered to the extent practicable and to the extent they provided relevant information. If the repository was authorized, after DOE selected a transportation mode and specific transportation corridor, more definitive information could be developed on conflicts with land

uses and various agency plans and policies, and ultimately the mitigation measures that could be needed to resolve conflicts and impacts on a given area.

7.5.1 (10221)

Comment - EIS002209 / 0001

Therefore I challenge the Federal Government to provide the citizens of Nevada with legitimate proof of federal ownership of the property known as Yucca Mountain, proof that meets the test required by the contract of federalism as evidence of your rightful rulemaking powers at Yucca Mountain. I ask you to respond truthfully to the following questions: If you already own Yucca Mountain, why does the contract say you must buy it? If the state doesn't own it, how could they sell it to you?

Response

The Federal Land Policy and Management Act of 1976 (Public Law 94-579) contains the following definition: "The term 'public lands' means any land and interest in land owned by the United States within the several States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except (1) lands located on the Outer Continental Shelf; and (2) lands held for the benefit of Indians, Aleuts, and Eskimos." All of the Bureau of Land Management land analyzed in the potential land withdrawal area falls within this definition with the exception of the patented mining claim, which is now private land. DOE obtained the information used for land ownership in the EIS from Master Title Plats provided by the Bureau of Land Management. The requirements of the Federal Land Policy and Management Act would be applied to any withdrawal action.

7.5.1 (10555)

Comment - EIS002156 / 0005

In volume 1, impact analysis, chapters 1-15, at 3.1.1.3, the Department of Energy misrepresents the facts of the Nuclear Regulatory Commission licensing criteria for a repository (10 CFR Part 60). The Nuclear Regulatory Commission requires site ownership and control, not ownership, or permanent control, which is presented in the Department of Energy's DEIS 7, affected environment, page 3-7.

Response

The Nuclear Regulatory Commission licensing criteria for disposal of spent nuclear fuel and high-level radioactive wastes in the proposed geologic repository at the Yucca Mountain site are contained in 10 CFR Part 63, *Disposal of High-Level Radioactive Wastes in a Geological Repository at Yucca Mountain, Nevada*. Under 10 CFR 63.121, "Requirements for ownership and control of interests in land," the regulations state, "(a) Ownership of land. (1) Both the geologic repository operations area and the controlled area shall be located in and on lands that are either acquired lands under the jurisdiction and control of DOE, or lands permanently withdrawn and reserved for its use. (2) These lands shall be held free and clear of all encumbrances, if significant, such as: (i) rights arising under the general mining laws; (ii) easements for right-of-way; and (iii) all other rights arising under lease, rights of entry, deed, patent, mortgage, appropriation, prescription, or otherwise."

In other words, the proposed repository must be on land that is either under the jurisdiction and control of DOE or permanently withdrawn and reserved for its use by DOE.

7.5.1 (11230)

Comment - EIS000085 / 0004

The land belongs to the government. Now they asked us that when the nuclear weapons went on. For a long time, and will never come back to the state.

If they close that down tomorrow, as far as any part of nuclear, they'll never open it up back to public land. They couldn't afford to, because there are hot spots out there. There's things that people could get into.

So that land is paid and bought -- bought and paid for -- not necessarily paid for, but it's been bought.

But why not let the government use the land instead of looking for other places where we will have to take more land away from the public?

It don't matter where else you go with this thing, some other state. We're going to pay through the nose again, and we paid plenty more here. We have. So does the whole nation.

Response

Thank you for your comment.

7.5.1 (12192)

Comment - EIS001888 / 0416

[Clark County summary of comments it has received from the public.]

One commenter requested that the EIS discuss how the repository program will be consistent with DOE's Land Facility Use Management Policy on ecosystem management, sustainable development, and stakeholder participation in decisionmaking. The commenter also requested an explanation of how the Yucca Mountain Site Characterization Project (YMP) will be consistent with the Resource Management Plan being developed for the Nevada Test site (NTS) and how DOE (NTS and the YMP) will interface with the Bureau of Land Management's Mojave-Southern Great Basin Regional Advisory Council, as well as take into account the rangeland health standards and guidelines. Another commenter stated that the EIS must address any conflicts between DOE's Proposed Action and the plans, policies, and controls of Indian Tribes.

Response

At present, the Yucca Mountain Project is a tenant on land under the administration of three Federal agencies: the Department of the Interior, Bureau of Land Management; the U.S. Air Force for the Nellis Range; and DOE for the Nevada Test Site (NTS). The DOE Nevada Operations Office is the responsible landlord of the NTS portion of the Yucca Mountain site. Use of that site by the Yucca Mountain Project is controlled by an intra-agency Memorandum of Agreement with the Nevada Operations Office that allows the use of about 230 square kilometers (89 square miles) of the NTS for site characterization activities. Through the Memorandum of Agreement, the Yucca Mountain Project is accountable for conducting its activities in accordance with the same environmental requirements as those that apply to the NTS. The Memorandum of Agreement gives the Yucca Mountain Project technical responsibility independent of, but in coordination with, environmental activities of the NTS. Section 3.1.1.2 of the EIS describes the current land ownership at Yucca Mountain. DOE has modified that section to clarify that it is achieving compliance with its Land Facility Use Management Policy under the Memorandum of Agreement with the Nevada Operations Office.

In addition, as a tenant on the NTS, the Yucca Mountain Project falls under the DOE Nevada Operations Office Resource Management Plan. If Congress authorized a land withdrawal for the repository at Yucca Mountain, DOE would reevaluate the need for a site-specific land use plan to ensure compliance with all applicable requirements. That plan, based on the principles of ecosystem management and sustainable development, would formally synthesize Yucca Mountain Project policies and procedures; draw on the successes of the Nevada Test Site Resource Management Plan; and solicit input from Federal and State agencies, stakeholders, and the general public, which would include the Mojave-Southern Great Basin Regional Advisory Council through its role as an advisory group to the Bureau of Land Management.

As stated in Section 4.1.1.1 of the EIS, Congress must withdraw land for the repository to meet the permanency requirements of 10 CFR 63.121. If Congress withdrew all the land analyzed in the EIS for the withdrawal area, the approximately 600 square kilometers (150,000 acres) would come under DOE control. If Congress withdrew the land for the repository, it would specify nonrepository land uses. Other uses of the land could be adversely affected by the land withdrawal; however, the actual impacts would depend on the exact area of the withdrawal and any use restrictions imposed by Congress. DOE has revised the EIS to indicate the potential impacts if the recommended area was withdrawn.

7.5.1 (13014)

Comment - 010334 / 0011

With respect to the ground-disturbing activities, there was the mention of additional land that would be needed and that's on 3-8 and 9 talking about additional acreage that would be potentially impacted for a total of 1600 acres and some of that has to do with the solar facilities and things that are beside it.

We believe that in our opposition to the project there is also the opposition of ground-disturbing activities. So we would suggest that any activities that are proposed regardless of nature always consider what has the least disturbance to the land. As such there is under the long term -- I'm sorry -- the high heat mode I believe is what it's called. I'm trying to get the term. I'm sorry. The higher temperature repository operating mode.

In looking at those various options, there is one that -- one of the options would consider least disturbance to the ground and that's what we would be proposing.

Response

Thank you for your comment. DOE will continue to evaluate design features and operating modes that would reduce uncertainties or improve long-term performance and improve operational safety and efficiency. Design features will continue to evolve in response to additional as described in Section 4.1.1.2 of the EIS the higher-temperature operating mode would disturb less land than the lower-temperature operating mode.

7.5.1 (13361)

Comment - 010182 / 0009

Land Area -- Expanding the capability of the Waste Handling Building to use for blending hotter and cooler waste packages, and surface aging; adding flexibility to include subsurface design to enable a cooler repository, including increased ventilation; adding a solar power generating facility to reduce the need for power from off the site; revising the emplacement drift layout to include increasing spacing between emplacement drifts to allow a moisture pathway between drift, and providing access to roads, all contribute to a much larger repository design than was originally estimated (and which an associated design and controls were set to "minimize impacts to drainage channels, potential for increased erosion and impacts from flash flooding" -- SDEIS, p3-7, para 3.1.3.2). Will this be a never-ending process? The DOE has expanded the land area which will be disturbed, but, the SDEIS provides no analysis of the additional disturbed land. The DOE assumes all land in the Yucca Mountain area is the same in terms of topography.

Response

Section 3.1.3.2 of the Supplement to the Draft EIS discusses the land area that would be disturbed if either a higher-temperature operating mode or lower-temperature operating mode for the flexible design was implemented. This information was carried forward to the Final EIS. The Supplement focused on the primary impact indicators, the most important contributors or parameters used to determine the impacts in a particular environmental resource area. These primary impact indicators are identified in Table 3-1 of the Supplement and compared to those quantified in the Draft EIS. Subsequent sections of Chapter 3 discuss the primary impact indicators by environmental resource area. For example, Section 3.1.5 of the Supplement discusses potential impacts to cultural resources and acknowledges that impacts to cultural resources could occur in areas where ground-disturbing activities would take place including the construction of a surface aging facility, the solar power generating facility, and access roads and transmission cables. If important cultural resources are present in or adjacent to the areas to be disturbed by construction activities, DOE would undertake appropriate mitigative actions plan to reduce adverse effects to the resources.

7.5.2 AIR QUALITY/CLIMATE

7.5.2 (383)

Comment - EIS000048 / 0003

The surrounding areas have no protection from particulates vented from the repository.

Response

The impacts of particulate and gaseous releases from naturally occurring radon-222 at the proposed repository were analyzed in the EIS. Normal activities during construction, operation and monitoring, and closure would release small amounts of naturally occurring radon-222 (a noble gas) and its decay products from the subsurface. DOE examined the potential health impacts to members of the public from exposure to radon-222 and its decay products released from the repository. Section 4.1.2 of the EIS discusses the estimated radiation doses to maximally exposed individuals and populations from subsurface radon-222 releases. Section 4.1.7 describes short-term health and safety impacts to workers (occupational impacts) and to members of the public. DOE estimated that the maximally exposed individual would have no more than a 0.000031 (3.1 in 100,000) probability of a latent cancer fatality over